

Scientific expertise:

- Spectroscopic and structural properties of amorphous solids, point defects, and nanostructured systems.
- Transient coherent regimes in magnetic resonance.

- Experimental research activity is mainly focused on the characterization, irradiation effects by ionizing radiation (gamma rays, beta, laser, particles, ..) and thermal processing of materials. The skills are mainly on bulk materials (extended dimensions), optical fibers, nanostructures, 2D materials. Most studied materials are pure and doped SiO₂; 0D, 2D and nanostructured C-derivatives.

- Co-author of about 180 articles in ISI scientific journals and conference proceedings. Co-inventor of 1 Italian patent. Referee of several ISI journals. Member of national and international collaborations with Universities, laboratories and research institutions.

- Training activities of graduate and undergraduate students. Undergraduate thesis supervisor and responsible for PhD research fellows. Teaching activities in several University courses and doctoral courses.

- Collaborator in several regional, national research projects and international cooperations, also in quality of manager. Head of research laboratories and technical personnel within projects or activities carried out for research.

- Organizer of scientific conferences.

- Guest editor of special issues of scientific ISI journals.

- Cooperations with technological industries: Evonik-Degussa GmbH; Draka COMTEQ France; St-Microelectronics.

- Young researchers Prize at VI Regional Conference CRRNSM (1999), Sicily-Italy.

- Award for the best poster presentation at International Congress ICDIM-2004, Latvia.